



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



STEVEN E. CHESTER
DIRECTOR

June 25, 2007

Ms. Margaret M. Guerriero, Director
Waste, Pesticides and Toxics Division (D-8J)
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Dear Ms. Guerriero:

SUBJECT: Response to U.S. Environmental Protection Agency, Region 5 (U.S. EPA),
Comments on the Remedial Investigation Work Plans Submitted by The Dow
Chemical Company (Dow) on December 1, 2006, to the Michigan Department
of Environmental Quality (MDEQ); MID 000 724 724

The MDEQ, Waste and Hazardous Materials Division (WHMD), has received your letter dated June 7, 2007, and the 44-page enclosure listing the U.S. EPA's comments, on the "Remedial Investigation Work Plan - Tittabawassee River and Upper Saginaw River and Floodplain Soils, Midland, Michigan" and "Midland Area Soils Remedial Investigation Work Plan" (RIWPs) that were submitted by Dow on December 1, 2006, to the MDEQ in response to the MDEQ's March 2, 2006, and April 13, 2006, Notices of Deficiency. Your letter indicates that the U.S. EPA considers the revised RIWPs to be significantly deficient and recommends that the MDEQ issue a Notice of Deficiency (NOD) to Dow within 30 days from the date of your letter requiring Dow to correct the identified deficiencies.

As we discussed during our telephone conference call on June 14, 2007, the MDEQ is disappointed that: (1) your June 7, 2007, letter and critique depart significantly from our agreement and operating practices on communications between the U.S. EPA and the MDEQ regarding Dow; and (2) your critique of Dow's RIWPs is not current and does not reflect the tangible progress that has been made during a time when continuing the ongoing investigation and remediation work is crucial. The MDEQ believes that issuing an NOD in 30 days as you have recommended is both unnecessary, given the status of the overall effort, and will divert Dow and MDEQ resources from accomplishing the investigatory and interim response activity work that is already underway this field season.

Our initial review of the U.S. EPA comments revealed three categories into which the comments could be organized. Those categories are as follows: (1) comments related to issues already resolved or under active resolution; (2) comments with which we agree; and (3) comments with which we disagree.

Comments Related to Issues Already Resolved or Under Active Resolution

The U.S. EPA comments ignore the MDEQ approval of the Scopes of Work transmitted by letter dated October 18, 2005, to Dow and copied to the U.S. EPA. In addition, there is little recognition of the work accomplished to date and no acknowledgment that many of the

issues raised in the U.S. EPA comments are being addressed through the MDEQ May 3, 2007, approval of the *GeoMorph*™ process.

By way of our May 3, 2007, approval letter, the MDEQ determined that the pilot phase of the *GeoMorph*™- based investigation for the Upper Tittabawassee River (UTR) was successful as a pilot methodology to characterize sediments and floodplain soils in the UTR (*GeoMorph*™ Reaches A - O in the first 6.5 miles of the study area) and approved the use of the *GeoMorph*™ process, subject to some limitations and clarifications, to complete the site characterization for the balance of the Tittabawassee River study area and the upper portion of the Saginaw River.

Using the working meetings and *GeoMorph*™ approach, the following investigation work has been completed to date:

- Analysis of about 3,800 UTR samples for dioxins and furans;
- Initial analysis of 88 UTR samples for potential constituents of interest (PCOIs). Target analyte results have already been received that cover the U.S. EPA's listed analytes of highest concern (e.g., octachlorostyrene, hexachlorobenzene, aldrin, dieldrin, chlordane, DDT, mirex, and toxaphene);
- Sampling of several UTR erosion scars in November 2006 in Reaches L - O;
- Additional interim response activity (IRA) sampling to determine the extent of deposits in Reaches D, J, K, and O and significant work toward obtaining other necessary permits for this work from the MDEQ, Land and Water Management Division. In the case of Reach D, significant work toward obtaining permits from the MDEQ, Air Quality Division; MDEQ, Water Bureau; and the U.S. Army Corps of Engineers;
- Significant work toward development of the IRA work plans for Reaches J and K and obtaining other necessary MDEQ permits for this work;
- Collection of in-channel bathymetry data for Reaches A - V and completion of detailed river bottom mapping and subbottom profiling for Reaches A - O;
- Submittal of a detailed characterization plan for the in-channel portion of the UTR (approval for sampling to begin has been granted; final approval will be provided as part of the Middle Tittabawassee River Sampling and Analysis Plan [MTR SAP] approval);
- Mapping of geomorphic surfaces for the next 11 miles of the MTR;
- Submittal of the MTR SAP on June 15, 2007, which is currently under review;
- Collection of additional fish species to fill identified data gaps and agreement on collection of additional wild game (e.g., deer, turkeys, rabbits, geese, and ducks) **this field season**;
- Submittal of the human health risk assessment (HHRA) sensitivity analysis due July 1, 2007. Additionally, the MDEQ has been working with U.S. EPA staff and contractors on

various aspects of the HHRA (i.e., reasonable maximum exposure, sensitivity analysis, toxicity benchmarks, etc.) related to resolving and providing direction to Dow on these challenging HHRA issues; and

- Completion of the first soil sampling for dioxins and furans in the city of Midland since 1998 (completed during 2006), confirming that conditions are consistent with previous determinations. Collection and analysis of approximately 200 samples at 136 locations, including current near-plant sampling data for PCOIs at 36 locations.

The RIWP comments in your letter that will be addressed when Dow satisfies all of the requirements enumerated in our letter of May 3, 2007, include the following:

- Additional UTR data interpretation, including completion of statistical evaluation of homogeneity of geomorphic units and production of maps and cross sections;
- Geochemistry study with additional samples to further investigate in-channel and floodplain fate and transport characteristics to be submitted in **August 2007**. This will supplement the 39 initial samples that were profiled for size gradation, including dioxins and furans for each size class, and other physical characteristics;
- Determination concerning the potential use of the surface weighted average concentration approach (currently under discussion; collaborative agreement on the approach anticipated to be reached by **October 31, 2007**);
- Refinement of the target analyte list (TAL) as additional information on historical plant operations and waste management practices is provided as part of a revised RIWP to be submitted **later this summer**. As mentioned previously, analysis of over 80 initial samples has already been completed with submission of the first phase of results for an extended TAL. Additional results from this analytical work, including tentatively identified compounds, is scheduled for submittal on **July 16 and August 1, 2007**, respectively. Inherent in this work is the ability to revisit previously collected samples to analyze them for additional PCOIs that are determined to be important at a later date. This allows Dow to begin this analytical work in a more timely manner, rather than developing a "perfect" list before conducting any analyses; and
- Conduct of additional erosion scar sampling (under development as part of the UTR IRA/Pilot Corrective Action Plan [IRA/PCAP] activities and the MTR SAP) scheduled for completion **this field season**.

Pursuant to the conditions of the May 3, 2007, approval letter and the anticipated MTR SAP approval later this month, this previously agreed upon strategy will continue to provide valuable chemical characterization information along with additional soil geochemical data on a far more accelerated schedule than the approach identified in the U.S. EPA comments of June 7, 2007.

As for activities currently underway, the MDEQ expects to approve the MTR SAP and the more detailed in-channel characterization for the UTR **within the next two weeks** so that this work may proceed this summer to characterize approximately 18 miles of river channel

and floodplain. **As part of the MTR SAP, a significant degree of sampling of selected Priority 1 and Priority 2 residential properties will be conducted down the entire length of the Tittabawassee River this summer.** This work involves discussions with Dow to conduct additional statistical sampling using the Sampling Strategies and Statistics Training Materials that were developed under Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, to further “ground truth” the use of the *GeoMorph*™ process to gather exposure unit level data for human health risk assessment purposes. As you are aware, the MDEQ considers the “ground truthing” of *GeoMorph*™ to be a core component of our approval.

As indicated in our June 22, 2007, letter to Dow (copy enclosed), the MDEQ will continue to work collaboratively with Dow to resolve this core issue. However, if agreement cannot be reached, we will provide an appropriate modification to the MTR SAP to resolve this issue.

Issues With Which We Agree

The MDEQ is pleased that the U.S. EPA concurs with the use of the IRA/PCAP Decision Tree that was an attachment to the letter of May 3, 2007. The use of this tool has aided the process of evaluating and further refining the IRA/PCAP work for the UTR, including the IRAs that are underway for Reaches D, J, K, L, M, and N **this field season**. These are UTR in-channel sediment and floodplain soil/levee deposits that were identified as a result of the *GeoMorph*™ pilot investigation work conducted during the past year. The MDEQ considers it critical to address upstream deposits that could potentially be sources of recontamination prior to removing downstream in-channel deposits. Much of this work has turned out to be more extensive and complex from both a logistical and permitting standpoint than was originally anticipated. However, Dow staff and MDEQ staff have been diligently working through the technical and permitting issues for the past several months in order to ensure that these projects will be accomplished **this field season**.

The MDEQ concurs with the U.S. EPA that enforceable compliance schedules are necessary to ensure that progress continues on key components of the RIWPs. Therefore, **by July 20, 2007**, we commit to augmenting the schedules in the December 1, 2006, revised RIWPs with more detail in a partial, but enforceable, approval of the RIWPs prior to receiving the next revision later this summer.

Issues With Which We Disagree

As you are aware, the MDEQ has chosen to reach agreement with Dow on the investigation and IRA work for the Tittabawassee River and Upper Saginaw River and the overall RIWPs, including the HHRA and ecological risk assessment (ERA) placeholders, in a series of working meetings (usually bi-weekly) to advance this work in a streamlined manner. We believe that this collaborative and adaptive management process is generally more effective than the formal enforcement approach that the U.S. EPA is recommending. Progress made to date through working meetings is summarized on the second page of this letter. This is consistent with the approach taken with other facilities in Michigan in order to accomplish corrective action goals (e.g., Government Performance and Results Act of 1993 environmental indicators) in a timely manner. Documentation of these meetings is kept in the form of written notes on agreements reached, action items, and other outcomes that are kept in the administrative record, as well as handwritten staff notes that document the

discussions during these meetings. Additionally, U.S. EPA staff has participated in some of the meetings and is welcome to participate in any or all of these working sessions.

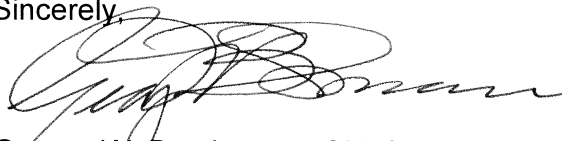
Later this summer, the MDEQ expects to receive revised RIWPs from Dow that address many of the comments raised in your letter. With respect to ERA issues, the MDEQ is committed to working with the natural resources damage trustees on this matter.

If the revisions to the RIWPs do not sufficiently address the identified deficiencies provided by the MDEQ and those enumerated in your letter, the MDEQ will provide review comments to Dow via a written NOD at a time when doing so will not divert staff from conducting critical oversight of corrective action activities **this field season**. To that end, the MDEQ will consider your comments as we continue to work with Dow. Our immediate priority is to ensure that the work that provides the most significant progress toward environmental and human health protection moves forward **this summer and fall**, as scheduled.

With respect to the HHRA working meetings, the MDEQ has made some progress on HHRA-related exposure data collection for this sampling season (additional fish species and wild game as noted above). The MDEQ recognizes that it has been difficult to make progress in resolving many of the HHRA and ERA issues, but this is in part based on their complexity. Additionally, under state law, the MDEQ is obligated to allow Dow the prerogative to pursue a site-specific approach. We disagree that an alternate approach will move these processes along more effectively than the process we are using at this time because we have not yet exhausted our discussions on all of the topics that were prioritized for working meeting discussions. However, the MDEQ understands, and concurs with, your observation that more explicit communication to Dow concerning our expectations is needed. This additional structure will be accomplished via the approval of enforceable compliance schedules **by July 20, 2007**. We will also consider pursuing a more enforcement-based approach as recommended by the U.S. EPA if substantial progress is not made by the end of this calendar year in resolving HHRA issues.

The MDEQ hopes that we have been able to demonstrate to the U.S. EPA that we are achieving good progress with respect to Dow's off-site corrective action work using a streamlined working meeting approach. As stated above, we are open to changing to a more formal approach if, and when, that is warranted. We will continue keeping your staff informed about progress on these activities through the established procedures. Should you have questions regarding this letter, please contact me.

Sincerely,



George W. Bruchmann, Chief
Waste and Hazardous Materials Division
517-373-9523

Enclosure

cc: Mr. Greg Cochran, Dow
Ms. Mary A. Gade, U.S. EPA
Mr. Gerald Phillips, U.S. EPA
Mr. Greg Rudloff, U.S. EPA
Mr. John Steketee, U.S. EPA
Mr. Steven E. Chester, Director, MDEQ
Mr. Jim Sygo, Deputy Director, MDEQ
Mr. Frank Ruswick, Special Assistant to the Director, MDEQ
Ms. De Montgomery, MDEQ
Mr. Steve Buda, MDEQ
Mr. Terry Walkington/Ms. Trisha Peters, MDEQ
Ms. Virginia Himich, MDEQ
Ms. Cheryl Howe, MDEQ
Dr. Deb MacKenzie-Taylor, MDEQ
Mr. Allan Taylor, MDEQ
Off-Site Corrective Action File



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



STEVEN E. CHESTER
DIRECTOR

June 22, 2007

Mr. Greg Cochran, Director
Michigan Dioxin Initiative
Michigan Operations
The Dow Chemical Company
1790 Building Washington Street
Midland, Michigan 48674

Dear Mr. Cochran:

SUBJECT: Letter Dated May 22, 2007, Regarding *GeoMorph*™ Pilot Site Characterization Report, Upper Tittabawassee River and Floodplain Soils (Report) and E-mail Dated May 25, 2007; The Dow Chemical Company, Michigan Operations (Dow); MID 000 724 724

This letter serves two purposes by responding to: (1) the May 22, 2007, letter from Mr. Ben Baker of Dow, which was sent in response to my letter of May 3, 2007; and (2) your e-mail of May 25, 2007, to me on exposure unit sampling of Priority 1 and 2 properties.

GeoMorph™ Approval

My May 3, 2007, letter granted Dow approval to use the *GeoMorph*™ process to complete the site characterization of the balance of the Tittabawassee River study area and the upper portion of the Saginaw River. This approval was conditioned on several limitations and clarifications that were listed in that letter.

As you are aware, in order to facilitate approval of the *GeoMorph*™ process for use during this field season, the Michigan Department of Environmental Quality (MDEQ) focused on four unresolved core components that the MDEQ considered critical for approval. Mr. Baker's letter of May 22, 2007, indicated that Dow does not consider the use of the rapid turn dioxin analysis 1613-TRP/RT methodology or the comparability study, the geochemistry study, or the interim response activity/pilot corrective action plan (IRA/PCAP) process to be part of the *GeoMorph*™ process, but rather part of the site characterization component of the Tittabawassee River and Floodplain Remedial Investigation Work Plan (RIWP). The MDEQ disagrees.

The effective and efficient implementation of the *GeoMorph*™ process is critically dependent upon the near real time delivery of accurate analytical results. Therefore, Dow was required to demonstrate that the 1613-TRP/RT methodology produced reliable results in advance of approving the use of the same methodology for the balance of the *GeoMorph*™-based investigation. The understanding of the fate, transport, and deposition of contaminated media has been improved, and will be further improved, by the geochemistry work required as a component of the May 3, 2007, approval (see Section 5.1.3 – Sediment Geochemistry, of the *GeoMorph*™ Sampling and Analysis Plan, July 7, 2006). The IRA/PCAP process provides a process to initiate additional investigation as part of the *GeoMorph*™ process to determine if IRAs are required in advance of the implementation of a final remedy.

The MDEQ does agree that the above core components will also become part of the RIWP once that document has been revised by Dow and approved by the MDEQ. The MDEQ and Dow have prioritized work on the site characterization component of the RIWP to occur in July, after completion and approval of the Middle Tittabawassee River Sampling and Analysis Plan (MTR SAP). At this time the RIWP has not been approved, pending the submittal of revisions in response to deficiencies identified during the series of working sessions held during the spring of 2007 and resolution of the human health risk assessment and ecological risk assessment placeholders. The MDEQ anticipates modifying and approving enforceable compliance schedules for the Tittabawassee River and Floodplain and Midland Area Soils RIWPs by July 20, 2007. The MDEQ also expects to grant a partial approval of the site characterization aspects of the RIWP later this summer, which is consistent with our prioritization of this year's work. As a result, the characterization of the middle 11 miles of the Tittabawassee River will not be delayed.

Exposure Unit Sampling - Priority 1 and 2 Properties

With respect to the need for additional statistical information, this core issue is addressed in my May 24, 2007, e-mail to you (enclosed). We also discussed the importance of this issue and the practicability of the associated sampling during a meeting on June 7, 2007. Consistent with that discussion, the MDEQ will require practicable, but statistically-based, exposure unit characterization at a number of Priority 1 and Priority 2 properties to validate and compare the *GeoMorph*™ level of characterization to the exposure unit level of characterization required at other sites of environmental contamination in Michigan. As noted in my May 24, 2007, e-mail, the MDEQ anticipates this will be done using one or more of the strategies laid out in the MDEQ's Statistical Sampling Strategies Training Manual (S3TM). This has been the MDEQ's understanding based on discussions with Dow over the past year, and we are disappointed that it appears to be emerging as an issue of contention. We do, however, agree with your suggestion to address this issue on a technical basis after the initial *GeoMorph*™-based sampling has been completed.

Supplementing the "Rapid Turn" Method with 1613B Analyses

The May 22, 2007, letter from Mr. Baker indicates that Dow disagrees with the MDEQ's summary of the resolution/clarification of this issue. The MDEQ has reviewed our notes and believes that the May 3, 2007, letter accurately reflects our discussions and agreements with Dow on this issue. We do note in the May 3, 2007, letter that the "frequency of additional analyses will be agreed on during the development of the Middle Tittabawassee River Sampling and Analysis Plan." Therefore, we believe there is an adequate mechanism to resolve any remaining disagreements with respect to this issue.

Additional Geochemistry Work

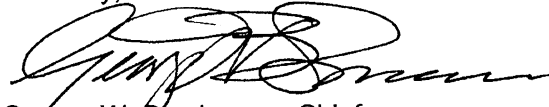
With respect to the "additional geochemistry" concern posed in the Dow letter of May 22, 2007, the MDEQ is not asserting that there was prior agreement on the timing of additional geochemistry work. Further, the MDEQ did not agree to address this issue after the approval of the MTR SAP. The MDEQ has specified as a condition of approval that additional geochemistry work be completed and submitted by the end of August 2007. This is necessary so that the additional information can be taken into account during the implementation of the MTR SAP. As we have stated previously, the MDEQ will work with Dow to identify a reasonable number of samples for additional work on a time frame that will allow delivery of the supplemental geochemistry work by the end of August 2007.

In-Channel Characterization

With respect to the "in-channel characterization" issue raised in Dow's letter, the MDEQ agrees that Dow has provided sufficient information in "working draft" form to allow Dow to proceed with the in-channel characterization on Reaches L, M, and N. The finalized "in-channel" work plan will be provided as part of the MTR SAP.

Should you have questions regarding this clarification, please contact Mr. Allan Taylor, Hazardous Waste Section (HWS), WHMD, at 517-335-4799 or by e-mail at taylorab@michigan.gov; Ms. De Montgomery, HWS, WHMD, at 517-373-7973 or by e-mail at montgomeryd@michigan.gov; or you may contact me.

Sincerely,



George W. Bruchmann, Chief
Waste and Hazardous Materials Division
517-373-9523

Enclosure

cc: Mr. Ben Baker, Dow
Mr. David Gustafson, Dow
Ms. Margaret M. Guerriero, U.S. Environmental Protection Agency, Region 5
Mr. Gerald Phillips, U.S. Environmental Protection Agency, Region 5
Mr. Greg Rudloff, U.S. Environmental Protection Agency, Region 5
Mr. Jim Sygo, Deputy Director, MDEQ
Ms. Liane Shekter Smith, MDEQ
Ms. De Montgomery, MDEQ
Ms. Cheryl Howe, MDEQ
Mr. Allan Taylor, MDEQ
Off-Site Corrective Action File

From: George Bruchmann
To: ggcochran@dow.com
Date: 5/24/2007 4:23:07 PM
Subject: Issue of Concern Regarding Exposure Unit Sampling - Priority 1 and 2 Properties

Greg,

To follow up on our discussion yesterday, I wanted to review the background on the Priority 1 and 2 statistically based sampling issue that we have been discussing with Dow over the last year. Prior to meetings conducted on Tuesday and Wednesday of this week, the MDEQ had the understanding that there was agreement on this core technical issue which is addressed in Section 9.1.13 of the December 1, 2006, Remedial Investigation Work Plan (excerpted page attached).

As you are aware, the MDEQ and Dow have committed to a path forward for approval of the RIWP that utilizes "placeholders" for key unresolved sections (e.g., HHRA, ERA) and an interactive review process that will allow revision and approval of the RIWP in a more efficient manner.

The issue of exposure unit level sampling on Priority 1 and 2 properties was collaboratively addressed during the development of this section of the RIWP. The concept discussed and previously agreed to is that some "exposure unit" level sampling would be done at Priority 1 and Priority 2 properties after the initial GeoMorph-based characterization is completed. We continue to believe that GeoMorph does a good job at predicting ranges of concentrations on specific "geomorphic surfaces" but we need to make sure that it gives adequate information at the "exposure unit" level - especially where people are living and/or farming.

The GeoMorph process would be used to determine where Priority 1 and 2 properties may reasonably be above the applicable criteria. A subset of these properties would be selected and more detailed exposure unit based sampling would be conducted using one or more of the strategies laid out in the MDEQ's Statistical Sampling Strategies Training Manual guidance document. In this way we can tie the GeoMorph process to the more standard process for evaluation of concentrations and exposure under Parts 201 and 111 (e.g., at a house on a 1/4 acre parcel). This process to link GeoMorph to the standard exposure unit evaluation, which is how the MDEQ routinely applies cleanup criteria, and is necessary to firmly support our technical and regulatory decisions on the land uses of highest concern - especially on a highly visible project which is likely to be precedent setting for the MDEQ. We see this work as a key component of our approval of the GeoMorph process and consistent with prior agreements for use of the GeoMorph process on areas where we are most concerned about exposure.

This is also consistent with our May 3, 2007, approval letter you on the GeoMorph process which states, in part:

"The MDEQ continues to reserve the right to require additional sampling, as necessary, to refine the understanding of the distribution of contamination in and between the identified depositional units (geomorphic surfaces). As with conventional site investigation techniques, the need to conduct additional sampling will be based, in a large part, on reasonable predictions of future land use and the level of certainty required for remedial decision-making."

Based on our conversation yesterday, I believe that it is possible that there is simply a communication problem related to this issue and that Dow and the MDEQ remain in agreement on this issue. However, because this is a core component of the MDEQ's approval of the GeoMorph process, we believe it is necessary to clarify, and hopefully resolve, this issue immediately.

I look forward to further discussion with you on this issue either tomorrow (before or after the staff-level meeting among Dow, Water Bureau, and WHMD to discuss the additional characterization data and NPDES issues related to the Reach D PCAP/IRA) or next week if tomorrow is not workable.

Thank you,

George Bruchmann, Chief
Waste & Hazardous Materials Division
Michigan Department of Environmental Quality
tel.: 517.373.9523; fax: 517.373.4797;
e-mail: bruchmag@michigan.gov

CC: Allan Taylor; Ben Baker; Cheryl Howe; Deborah Mackenzie-Taylor; Delores
Montgomery; dgustafson@dow.com; Jim Sygo

9.1.13 SAP Development for Tittabawassee River and Priority I and II Properties

In early 2007, a *GeoMorph*[®] SAP will be prepared for the Middle and Lower Tittabawassee River based on the geomorphic mapping that will be conducted in late 2006. As with the UTR SAP, the lower portions of the Tittabawassee River will be divided into a series of reaches based on the geomorphology and anthropogenic influences along the river. Sampling locations within each reach will be developed in consultation with MDEQ along a sufficient number of transects to define the nature and extent of COI contamination in each of the geomorphological features. As with the UTR SAP, the order of the reach sampling sequence will depend on a variety of factors including the characteristics of the reaches, obtaining access, and the nature of the equipment needed to acquire samples to the necessary depth to define the vertical extent of COI contamination.

During the collaborative development of the SAP, special consideration will be given to sampling reaches containing the Priority I and Priority II residential properties defined in the 2005 Framework Agreement such that these samples will be obtained during 2007. As part of this process, statistical sampling will be conducted to evaluate the representativeness of the *GeoMorph*[®] site characterization for establishing exposure point concentrations.

9.1.14 Prioritization of UTR Areas With Erosion Risk Using Pilot Corrective Actions Matrix

A Pilot Corrective Actions Matrix (Attachment K) has been developed to assist in organizing and evaluating the multiple environmental aspects of a given area found to contain high levels of COIs and which is at risk of erosion and downstream transport and deposition. In addition, the Pilot Corrective Actions Matrix will include information on the presence of endangered or threatened species and/or sensitive habitat in the vicinity of the area of interest. The Dow consulting team will use this matrix in consultation with MDEQ and USEPA by the end of 2006 to identify areas in the UTR that require pilot projects on selected corrective action strategies to mitigate the risk of erosion and downstream transport of COIs.

9.1.15 Development and Preliminary Screening of Short and Long Term Corrective Action Technologies for Areas With High Risk of Erosion in UTR

Throughout 2006, Dow's consultants have been evaluating alternative corrective action technologies to abate, manage or eliminate the risks posed by COIs in the overbank of the Tittabawassee River. The evaluation process is ongoing as of this writing as information becomes available from the UTR SAP